

# Culinary Arts Occupational Group

*Inland Empire/Desert Region (Riverside-San Bernardino-Ontario Metropolitan Statistical Area)*

## Summary

- Employment for culinary arts occupational group is expected to **increase by 15%** through 2021, **more than 22,450 job openings** will be available over the five-year time frame.
- The **median hourly wage** for each of the occupations in the culinary arts occupational cluster **exceed the MIT Living Wage estimate of \$12.10 per hour** for a single adult living in the Inland Empire/Desert Region.
- Based on the average annual number of program completions between the selected TOP code (**75 community college, 225 other educational institutions, total 330**), and the annual openings for culinary arts occupations in the local region (**4,491 job openings**), there appears to be an opportunity for program growth.

## Job Opportunities

In 2016, there were more than 25,300 culinary arts occupational group jobs in the Inland Empire/Desert Region. Across the local region, employment related to the culinary arts occupational group is expected to increase 15% through 2021. Employers in the Inland Empire/Desert Region will need to hire more than 22,450 workers over the next five years to fill new jobs and to backfill jobs that workers are leaving (includes retirements). Appendix A, Table 1 show the projected job growth for each of the occupations in this group.

*Exhibit 1: Five-year projections for the culinary arts occupational group in the Inland Empire/Desert Region*

Region	2016 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Inland Empire/Desert Region	25,310	15%	22,453	4,491	16%

Source: EMSI 2017.3

Over the last 12 months (October 2016 to September 2017), there were 4,037 advertisements (ads) for jobs in the culinary arts occupational group in the Inland Empire/Desert Region. In the full-



year 2016 there were 4,564 job ads; 3,531 job ads in 2015; 3,285 job ads in 2014; and 3,546 job ads in 2013. Exhibit 2 shows the number of job ads posted during the last 12 months for each of the occupations in the culinary arts occupational group.

*Exhibit 2: Job ads by each of the culinary arts occupational group in the Inland Empire/Desert Region during the last 12 months, Oct 2016 – Sep 2017*

Occupation	Job Ads
First-Line Supervisors of Food Preparation and Serving Workers	2,272
Cooks, Restaurant	1,563
Chefs and Head Cooks	198
Cooks, Institution and Cafeteria	3
Cooks, Private Household	1
<b>TOTAL</b>	<b>4,037</b>

Source: Burning Glass – Labor Insights

## Earnings

The median wage for each occupation in the culinary arts occupational group is above the MIT Living Wage estimate of \$12.10 per hour for a single adult living in the Inland Empire/Desert Region. The entry-level wages for each of these occupations start out low, but with experience, a worker will earn a living wage. See Exhibit 3 for wage information by occupation for the Inland Empire/Desert Region.

*Exhibit 3: Earnings for culinary arts occupational group in the Inland Empire/Desert Region*

<b>Occupation</b>	<b>Entry to Experienced Hourly Earnings Range*</b>	<b>Median Wage*</b>	<b>Avg. Annual Earnings</b>
Chefs and Head Cooks	\$11.33 to \$40.69	\$18.26	\$47,400
First-Line Supervisors of Food Preparation and Serving Workers	\$10.24 to \$23.23	\$13.43	\$31,700
Cooks, Institution and Cafeteria	\$10.12 to \$22.33	\$14.40	\$32,000
Cooks, Private Household	\$10.16 to \$39.81	\$13.52	\$40,200
Cooks, Restaurant	\$10.18 to \$15.66	\$12.23	\$26,600

Source: EMSI 2017.3

\*Entry Hourly is 10th percentile wage, median is 50th percentile wage, experienced is 90th percentile wage.

### **Work Locations, Skills, and Education**

According to job ads, the top worksite regional cities for jobs in this occupational group were Riverside, Rancho Cucamonga, Ontario, Corona, and La Quinta. Exhibit 4 lists the top specialized, soft, and software and programming skills that employers are seeking when looking for workers to fill culinary arts positions. Cooks, institution and cafeteria and chefs, private households were not included due to the low number of job ad for these occupations.

*Exhibit 4: Top skills in greatest demand for the culinary arts occupational group in the Inland Empire/Desert Region, Oct 2016-Sep 2017*

Occupation	Specialized skills	Soft skills	Software and Programming skills
First-Line Supervisors of Food Preparation and Serving Workers	<ul style="list-style-type: none"> <li>• Cost Control</li> <li>• Cash Handling</li> <li>• Staff Management</li> <li>• Restaurant Operations</li> </ul>	<ul style="list-style-type: none"> <li>• Organizational Skills</li> <li>• English</li> <li>• Mathematics</li> <li>• Creativity</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Excel</li> <li>• Microsoft Office</li> <li>• Microsoft Word</li> </ul>
Cooks, Restaurant	<ul style="list-style-type: none"> <li>• Food Preparation</li> <li>• Food Safety</li> <li>• Temperature Checking</li> <li>• Packaging</li> </ul>	<ul style="list-style-type: none"> <li>• Physical Demand</li> <li>• Communication Skills</li> <li>• Building Effective Relationships</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Excel</li> <li>• Notepad</li> </ul>
Chefs and Head Cooks	<ul style="list-style-type: none"> <li>• Scheduling</li> <li>• Budgeting</li> <li>• Staff Management</li> <li>• Food Service Experience</li> </ul>	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Communication Skills</li> <li>• Organizational Skills</li> <li>• Physical Demand</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Excel</li> <li>• Microsoft Office</li> <li>• Microsoft Word</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 5 displays the entry-level education level education typically required to enter each occupation according to the Bureau of Labor Statistics, educational attainment for incumbent workers with “some college, no degree” and an “associate degree” according to the U.S. Census, and the minimum advertised education requirement requested by employers in online job ads.

*Exhibit 5: Educational attainment and online job ads with minimum advertised education requirements for the culinary arts occupational group in the Inland Empire/Desert Region, Oct 2016-Sep 2017*

Occupations	Typical Entry-Level Education Requirement	Educational Attainment (Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework)	Minimum Advertised Education Requirement from Job Ads		
			High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Chefs and Head Cooks	HS diploma or equivalent	39%	56%	23%	21%
First-Line Supervisors of Food Preparation and Serving Workers	HS diploma or equivalent	38%	83%	3%	14%
Cooks, Institution and Cafeteria	No formal education	24%	-	-	-
Cooks, Private Household	Postsecondary nondegree award	24%	-	-	-
Cooks, Restaurant	No formal education	24%	97%	3%	-

Source: EMSI 2017.3, Current Population Survey, Burning Glass – Labor Insights

## Industry

Exhibit 6 displays the industries that employ the most culinary arts occupations in the two-county region. Staffing patterns show the industries employ the most of a specific occupation. “N/A” indicates that no information could be obtained from the limited job ads for that occupation.

*Exhibit 6: Top Industries employing each culinary arts occupational group in the Inland Empire/Desert Region*

Occupation	Top Industries Staffing Pattern (NAICS)	Top Industries Job Ads (NAICS)
Chefs and Head Cooks	<ul style="list-style-type: none"> <li>Restaurants and Other Eating Places (7225)</li> </ul>	<ul style="list-style-type: none"> <li>Traveler Accommodation (7211)</li> <li>Restaurants and Other Eating Places (7225)</li> </ul>
First-Line Supervisors of Food Preparation and Serving Workers	<ul style="list-style-type: none"> <li>Restaurants and Other Eating Places (7225)</li> </ul>	<ul style="list-style-type: none"> <li>Restaurants and Other Eating Places (7225)</li> <li>Traveler Accommodation (7211)</li> </ul>
Cooks, Institution and Cafeteria	<ul style="list-style-type: none"> <li>Education and Hospitals (Local Government) (9036)</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Cooks, Private Household	<ul style="list-style-type: none"> <li>Religious Organizations (8131)</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Cooks, Restaurant	<ul style="list-style-type: none"> <li>Restaurants and Other Eating Places (7225)</li> </ul>	<ul style="list-style-type: none"> <li>Restaurants and Other Eating Places (7225)</li> <li>Traveler Accommodation (7211)</li> </ul>

Source: EMSI 2017.3, Burning Glass – Labor Insights

## Student Completions

Exhibit 7 shows the annual average regional community college awards (associate degrees and certificates) conferred during the three academic years between 2013 and 2016, as well as other awards granted outside the California Community College system from 2012-2015, with the relevant TOP code. Please note, an award is not equivalent to a single person in search of a job opening since a student may earn more than one award, such as an associate degree in addition to a certificate.

Community College student outcome information was obtained from the CTE LaunchBoard based on the selected TOP code(s) and region:

Exhibit 7: Annual average community college student completions for the culinary arts program in the Inland Empire/Desert Region

<b>1306.30 – Culinary Arts</b>	<b>Annual Avg. CC Headcount (2015-16)</b>	<b>CC Annual Avg. Awards (2013-16)</b>	<b>Other Educational Institutions Annual Avg. Certificates or Other Credit Awards (2012-15)</b>
<b>Chaffey</b>	85		
Certificate 30 to < 60 semester units		13	
<b>Copper Mountain</b>	31		
Certificate 30 to < 60 semester units		1*	
<b>Desert</b>	155		
Associate Degree		7	
Certificate 30 to < 60 semester units		2	
Certificate 18 to < 30 semester units		6	
<b>San Bernardino</b>	114		
Certificate 30 to < 60 semester units		16	
<b>Riverside</b>	218		
Associate Degree		6	
Certificate 18 to < 30 semester units		24	
<b>Argosy University-The Art Institute of California-Inland Empire</b>			
Associate Degree			214
Award 1 < 2 academic yrs			41
<b>Total CC Headcount (2015-16)</b>	<b>603</b>		
<b>Total annual average community college awards</b>		<b>75</b>	
<b>Total annual average other awards</b>			<b>255</b>

Source: LaunchBoard, IPEDS

\*Copper Mountain awarded 1 certificate in 2015-16

**1306.30 – Culinary Arts program outcomes in the Inland Empire/Desert Region in academic year 2014-15:**

- The median annual earnings is \$15,396 (California median = \$17,522).
- 21% of students are earning a living wage (29%).
- Median change in earnings was 41% (41%).
- 73% of students are employed within six months after completing a program (64%).



## Sources

O\*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

Employment Development Department, Labor Market Information Division, OES

Employment Development Department, Unemployment Insurance Dataset

CTE LaunchBoard

Statewide CTE Outcomes Survey

Living Insight Center for Community Economic Development

California Community Colleges Chancellor's Office Management Information Systems (MIS)

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## **Appendix A: Occupation definitions, five-year projections, and earnings for culinary arts occupations**

### **Occupation Definitions (SOC code), Education and Training Requirement, Community College Education Attainment**

#### **Chefs and Head Cooks (35-1011)**

Direct and may participate in the preparation, seasoning, and cooking of salads, soups, fish, meats, vegetables, desserts, or other foods. May plan and price menu items, order supplies, and keep records and accounts.

*Entry-Level Educational Requirement: High school diploma or equivalent*

*Training Requirement: One to twelve months on-the-job training*

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 39%*

#### **First-Line Supervisors of Food Preparation and Serving Workers (35-1012)**

Directly supervise and coordinate activities of workers engaged in preparing and serving food.

*Entry-Level Educational Requirement: High school diploma or equivalent*

*Training Requirement: One to twelve months on-the-job training*

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 38%*

#### **Cooks, Institution and Cafeteria (35-2012)**

Prepare and cook large quantities of food for institutions, such as schools, hospitals, or cafeterias.

*Entry-Level Educational Requirement: No formal educational credential*

*Training Requirement: Less than one month on-the-job training*

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 24%*

**Cooks, Private Household (35-2013)**

Prepare meals in private homes. Includes personal chefs.

*Entry-Level Educational Requirement: Postsecondary nondegree award*

*Training Requirement: One to twelve months on-the-job training*

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 24%*

**Cooks, Restaurant (35-2014)**

Prepare, season, and cook dishes such as soups, meats, vegetables, or desserts in restaurants. May order supplies, keep records and accounts, price items on menu, or plan menu.

*Entry-Level Educational Requirement: No formal educational credential*

*Training Requirement: One to twelve months on-the-job training*

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 24%*

*Table 1. 2016 to 2021 job growth for the culinary arts occupational group, Inland Empire/Desert Region*

Occupation (SOC)	2016 Jobs	2021 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Chefs and Head Cooks (35-1011)	1,738	1,939	201	12%	1,236	247
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	8,797	10,194	1,397	16%	7,927	1,585
Cooks, Institution and Cafeteria (35-2012)	2,949	3,393	444	15%	2,691	538
Cooks, Private Household (35-2013)	11	10	(1)	(9%)	<10	Insf. Data
Cooks, Restaurant (35-2014)	11,815	13,470	1,655	14%	10,592	2,118
<b>Total</b>	<b>25,310</b>	<b>29,005</b>	<b>3,695</b>	<b>15%</b>	<b>22,453</b>	<b>4,491</b>

Source: EMSI 2017.3